

U.S. Patent Application No. 09/896,886
Amendment dated March 1, 2006
Reply to Office Action of November 1, 2005

REMARKS

Reconsideration and continued examination of the above-identified application are respectfully requested.

Applicants note that the Examiner continues to allow claims 56 - 73, 83 - 86, and 112, 113, but has rejected claims 75 - 82, 111 and 115 - 118 on new grounds. For the reasons provided herein, it is respectfully submitted that all of the pending claims are allowable.

The amendment to the claims further defines what the applicants regard as the invention. Full support for the amendment can be found throughout the present application, including the claims as originally filed and the present specification. In particular, claims 111 and 115 are reworded to clarify that the radiation-absorptive layer has the property of absorbing infrared or near-infrared radiation. Accordingly, no questions of new matter or new issues for consideration should arise, and entry of the amendment is respectfully requested.

Moreover, in a telephone conversation between Examiner Cynthia Hamilton and Ralph T. Webb, Reg. No. 33,047 on December 5, 2005, it was agreed that the listing of claims should treat the Examiner's amendments to claims 76, 77, 79 and 80 as set forth in the Notice of Allowability dated May 13, 2005 as having been already entered in the application. Therefore, these claims, incorporating the Examiner's amendment, are designated with the claim identifier "previously presented."

Rejection of claims 75 - 82 and 115 - 118 under 35 U.S.C. § 112, second paragraph

At page 2 of the Office Action, the Examiner rejected claims 75 - 82 and 115 - 118 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. In particular, the Examiner alleged that the phrase "not substantially extractable by an organic solvent" renders the claim

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indefinite, on the alleged grounds that it is not clear which organic solvents or the conditions under which the polymer is not extractable. For the following reasons, this rejection is respectfully traversed.

Applicants respectfully submit that the phrase "not substantially extractable by an organic solvent" is clear on its face and would be readily understood by persons skilled in the art just by the plain and ordinary meaning of the words. In the context of claim 75, the phrase clearly means that the polymeric coating cannot be removed from the modified pigment product by any organic solvent. Although the M.P.E.P. at Section 2111.01 states that during examination, claims should be interpreted as broadly as their terms reasonably allow, the position taken by the Examiner, in the discussion of art rejections at pages 4 and 5 of the Office Action, that the phrase is indefinite because the limitation could be met as long as the polymer is not extractable in one organic solvent is simply not reasonable and is inconsistent with the plain meaning of the words themselves. A claim that was intended to convey the meaning that a polymer coating is not extractable in a particular organic solvent, yet is soluble in other organic solvents, would not be written with the phrasing of claim 75, but rather would name the particular organic solvent that the coating is not extractable in. Likewise, if it were intended that the polymer coating was not extractable by an organic solvent under a particular set of conditions, but might be extractable under a different set of conditions, the particular set of conditions that the coating is not extractable in would be named in the claim. In the absence of either a list of particular organic solvents or a set of conditions, the reasonable meaning of the claim is that the polymeric coating cannot be removed from the modified pigment product by any organic solvent.

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The Examiner further alleges that the specification does not provide guidance as to what is meant by the phrase "not substantially extractable by an organic solvent." However, guidance from the specification is not necessary since the meaning of the phrase is clear and unquestionable, for the reasons discussed above.

Therefore, this rejection should be withdrawn.

Rejection of claims 111 and 115 under 35 U.S.C. § 112, second paragraph

At page 6 of the Office Action, the Examiner rejected claims 111 and 115 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. In particular, the Examiner alleged that it was unclear what is meant by an action of absorbing infrared or near-infrared radiation with respect to a claim drawn to an element. Although the Applicants believe that the claim is clear as written, for the convenience of the Examiner, claims 111 and 115 are amended to explicitly specify that the radiation-absorptive layer is absorptive of infrared or near-infrared radiation, thus making it clear that absorptivity of infrared or near-infrared radiation is a property of the radiation-absorptive layer and not a process step. Therefore, this rejection should be withdrawn.

Rejection of claims 75 - 76, 79 - 82, 115 and 118 under 35 U.S.C. § 102(b) over Senga et al.

At page 3 of the Office Action, claims 75 - 76, 79 - 82, 115 and 118 were rejected under 35 U.S.C. § 102(b) as anticipated by Senga et al. (U.S. Patent No. 4,873,166). The Examiner alleged that Senga et al. discloses a printing plate made by taking an aluminum plate that has been subjected to a hydrophilizing treatment, coating the plate with an e-type copper phthalocyanine dispersed in an acrylic resin and drying the plate. The Examiner alleges that the particles would

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inherently be at least partially coated with the acrylic resin. The Examiner further alleges that the dried coating on the plate would inherently be able to absorb radiation and would therefore be a radiation absorptive layer. The Examiner further takes the position that the polymeric coating is not substantially extractable by an organic solvent, based on the Examiner's interpretation that the limitation is met if there is at least one organic solvent that the acrylic resin of Senga et al. is not soluble in and if extraction conditions could be selected that would not substantially extract the dried acrylic resin of Senga et al. For the following reasons, this rejection is respectfully traversed.

Independent claim 75 relates to a printing plate comprising a substrate and a radiation-absorptive layer, wherein the radiation-absorptive layer comprises at least one modified pigment product comprising a pigment that is at least partially coated with one or more polymeric coatings of an acrylic or styrenic polymer and wherein the polymeric coating is not substantially extractable by an organic solvent.

Senga et al., on the other hand, merely describes a plate that has a copper phthalocyanine pigment dispersed in an acrylic resin, with the dispersion being dried onto a plate. Even taking into account the Examiner's allegation that the particles of Senga et al. would inherently be at least partially coated with the acrylic resin, there is no teaching or suggestion in Senga et al. of a coating on the particles that is not substantially extractable by an organic solvent. Contrary to what is alleged by the Examiner, this limitation is not met by the possibility that some organic solvent or extraction conditions may exist that cannot extract the coating. The Examiner has not even shown this, but has only speculated that such a solvent may exist. Nevertheless, as discussed above, the plain and ordinary meaning of the phrase "not substantially extractable by an organic solvent" is that the coating is not substantially extractable by any organic solvent, and

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Senga et al. contains absolutely no teaching or suggestion of this limitation. Therefore, the rejection should be withdrawn.

Rejection of claims 75 - 76, 79 - 80, 115 and 118 under 35 U.S.C. § 102(a) or (e) over Kato et al.

At page 4 of the Office Action, claims 75 - 76, 79 - 80, 115 and 118 were rejected under 35 U.S.C. § 102(a) or (e) as anticipated by Kato et al. (U.S. Patent No. 6,080,449). The Examiner alleged that Kato et al. discloses a printing plate formed from coating the plate with a base having an acrylic/styrene polymer coating over a zinc oxide. The Examiner alleges that the particles would inherently be at least partially coated with the polymer. The Examiner further alleges that the dried coating on the plate would inherently be able to absorb radiation and would therefore be a radiation absorptive layer. The Examiner further takes the position that the polymeric coating is not substantially extractable by an organic solvent, based on the Examiner's interpretation that the limitation is met if there is at least one organic solvent that the polymer of Kato et al. is not soluble in and that extraction conditions could be selected that would not substantially extract the polymer of Kato et al. For the following reasons, this rejection is respectfully traversed.

As discussed above, independent claim 75 relates to a printing plate comprising a substrate and a radiation-absorptive layer, wherein the radiation-absorptive layer comprises at least one modified pigment product comprising a pigment that is at least partially coated with one or more polymeric coatings of an acrylic or styrenic polymer and wherein the polymeric coating is not substantially extractable by an organic solvent.

Kato et al., on the other hand, merely describes a plate that has zinc oxide pigment

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dispersed with a resin, with the mixture forming a coating for an image receiving layer. Even taking into account the Examiner's allegation that the particles of Kato et al. would inherently be at least partially coated with the resin, there is no teaching or suggestion in Kato et al. of a coating on the particles that is not substantially extractable by an organic solvent. Contrary to what is alleged by the Examiner, this limitation is not met by the possibility that some organic solvent or extraction conditions may exist that cannot extract the coating. The Examiner has not even shown this, but has only speculated that such a solvent may exist. Nevertheless, as discussed above, the plain and ordinary meaning of the phrase "not substantially extractable by an organic solvent" is that the coating on the particles is not substantially extractable by any organic solvent, and Kato et al. contains absolutely no teaching or suggestion of this limitation. Therefore, the rejection should be withdrawn.

Rejection of claims 75 - 76, 79 - 82, 115 - 118 under 35 U.S.C. § 102(b) over Shimizu et al.

At page 5 of the Office Action, claims 75 - 76, 79 - 82, and 115 - 118 were rejected under 35 U.S.C. § 102(b) as anticipated by Shimizu et al. (U.S. Patent No. 6,218,073 B1). The Examiner alleged that Shimizu et al. discloses plates wherein the acrylate resin-grafted carbon black is a carbon black pigment coated with acrylic resin that is also attached by graft in a layer along with the acrylic polymer particles. For the following reasons, this rejection is respectfully traversed.

As discussed above, independent claim 75 relates to a printing plate comprising a substrate and a radiation-absorptive layer, wherein the radiation-absorptive layer comprises at least one modified pigment product comprising a pigment that is at least partially coated with one or more polymeric coatings of an acrylic or styrenic polymer and wherein the polymeric coating

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is not substantially extractable by an organic solvent.


Shimizu et al., on the other hand, describes acrylic resin-grafted carbon black. A resin-grafted particle is a particle in which functional groups on the surface of the particle attach to end groups of polymers, which extend from the particle. Clearly, this creates a different morphology from a particle that is coated with a polymer. Therefore, there is no basis for the allegation by the Examiner that limitation of a pigment coated with an polymeric coating is met by the description of an acrylate resin-grafted carbon black. Therefore, the rejection should be withdrawn.

CONCLUSION

In view of the foregoing remarks, the applicants respectfully request the reconsideration of this application and the timely allowance of the pending claims.

If there are any fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 03-0060. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,



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